

Vasquez Boulevard & Interstate 70  
(VB/I-70) Superfund Site

Quarterly Public Meeting  
March 19, 2019

## What is a Superfund Site?

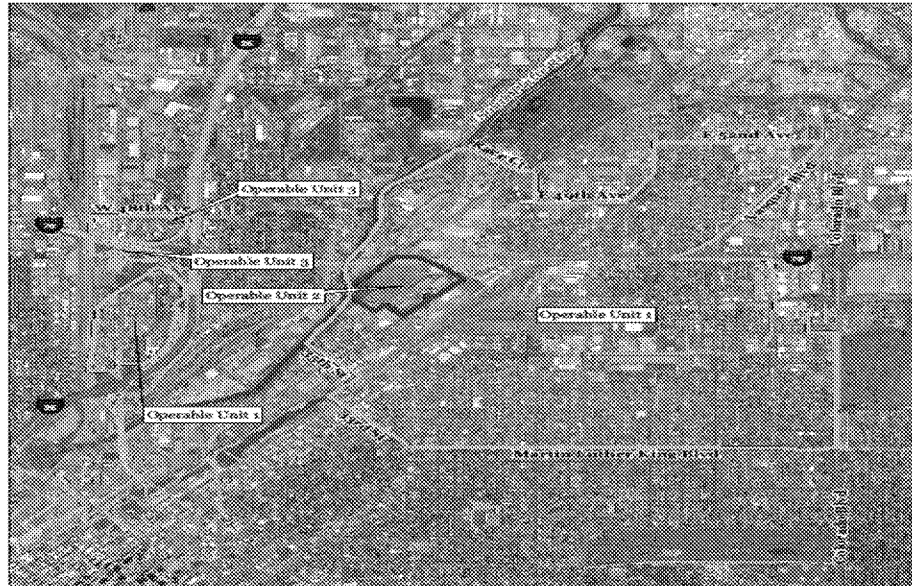
1980 - Congress established the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

CERCLA is informally called Superfund.

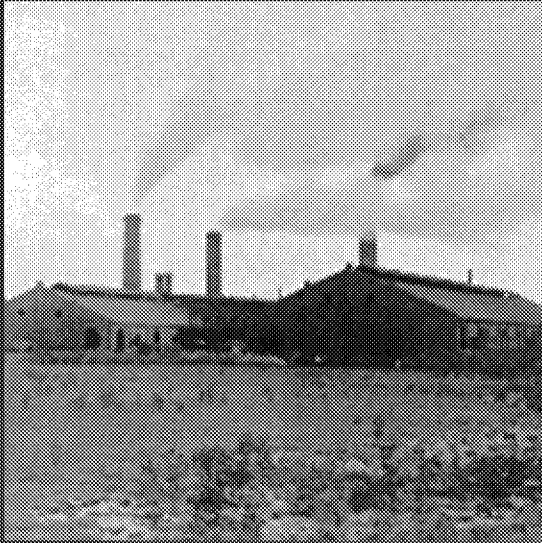
CERCLA allows EPA to clean up contaminated sites.

EPA added VB/I-70 to the national list of Superfund Sites in 1999.

## The Vasquez Boulevard & Interstate 70 Superfund Site (VB/I-70)



## Why is VB/I-70 a Superfund Site?



Smelters left behind heavy metal contamination in some area soils, groundwater, and sediments.

At VB/I-70, the primary contaminants of concern are lead and arsenic.

The Omaha & Grant Smelters, courtesy of Denver Public Library, Western History Collection, x-64114

In general, the smelter process involved combining ore, fuel, and flux (typically lime and slag) to separate the metallic components and form a melted product known as bullion. At the Omaha & Grant smelter, lead and silver would sink to the bottom of an iron chamber and the slag would float on the surface of the liquified metals. Slag is stony waste material separated from metals during smelting or refining of ore.

## Who is Involved?

U.S. Environmental Protection Agency (EPA)

Colorado Department of Public Health and Environment (CDPHE)

Denver Department of Public Health and Environment (DDPHE)

VB/I-70 Community Advisory Group (CAG)

## OU1 – What Have We Done?

Contaminants of concern – lead and arsenic in soils

Area - 4.5 square miles

Number of homes requiring sampling  
approx. 4,500  
(45 no access)

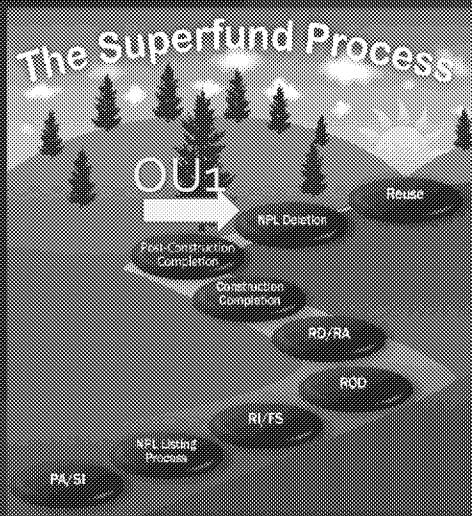
Number of homes requiring cleaned up  
approx. 800  
(10 no access)

Status – complete



OU1 is defined as residential yards within the Site with levels of lead or arsenic in soil that present an unacceptable risk to human health. includes the neighborhoods of Cole, Clayton, Swansea/Elyria, southwest Globeville, and a very small section of northern Curtis Park. While approx. 4,500 properties were sampled, not all required clean up. Only about 20 percent of the properties, or just more than 800, in no particular pattern, required cleanup. Of those properties where EPA never gained access to sample, or EPA gained access to sample, but not cleanup, there are notices of environmental conditions on their property files, and the State sends an annual mailing to describe the potential or known contamination and what to do about it to the property owners.

## OU1 – What Are We Doing?



EPA is proposing to delete Operable Unit 1 (OU1), Residential Soils, from the National Priorities List of Superfund Sites.

All sampling and cleanup at residential properties in the VB/I70 boundaries is complete!

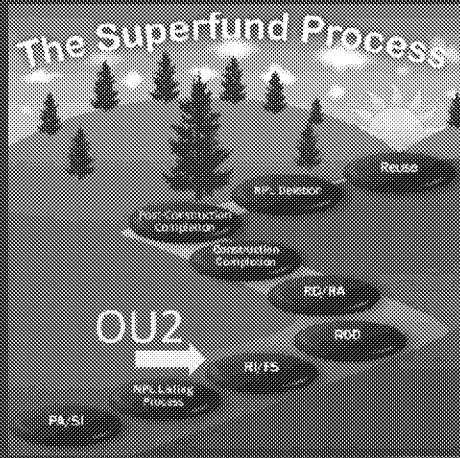
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## OU1- What Are The Next Steps?

- EPA published a notice of intent to delete on Feb. 6, 2018.
- EPA extended the public comment period to April 8, 2019.
- EPA is currently accepting public comments on the proposal.  
Go to: [www.epa/superfund/vbi-70](http://www.epa/superfund/vbi-70) to view the public notice and for instructions on how to comment.
- EPA will consider and respond to public comments and notify the public of its final decision.



## Operable Unit 2 – What Have We Done?



- 1999 - NPL listing
- 2004/05 ASARCO Soil and Groundwater Investigation
- 2005/06 Sediment, Surface Water and Groundwater Investigations
- 2008/09 - Remedial Investigation and Report
- 2009 - EPA Baseline Human Health and Screening Level Ecological Risk Assessment
- 2010 Feasibility Study
- Globeville Landing Outfall 2012 - 2014 - EPA Groundwater Studies
- 2015/16 - Environmental Conditions Investigations



Contaminants of Concern – heavy metals in soils and groundwater, primarily lead and arsenic

Area – Industrial /commercial - includes the Denver Coliseum and parking lot, Globeville Landing Park, surrounding businesses such as Pepsi Co. and the Forney Transportation Museum.

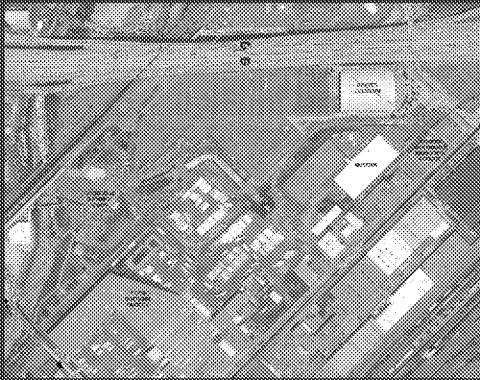
AOC for the RI/FS issued to ASARCO in June 2002 - American Smelting and Refining Company

ASARCO filed for bankruptcy in August 2005

AOC for RI/FS issued to Denver in 2008

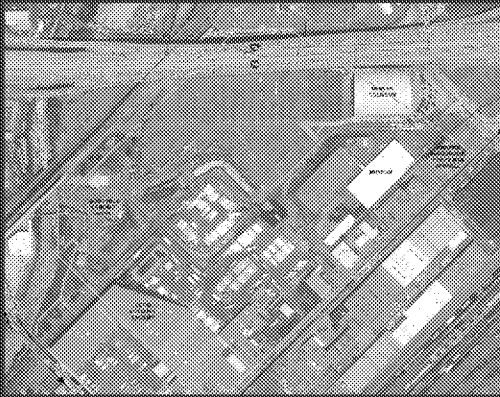
A remedial design decision was not made following the completion of the feasibility study due to uncertainty regarding land use and EPA's evaluation of the completeness of the RI. EPA then initiated GW studies.

## Operable Unit 2 – What We Are Doing Today



- August 2017 – EPA requested an updated Remedial Investigation and Feasibility Study Report
  - Scoping document due in 2019
- Compiling historical sampling data
- Analyzing data and assessing data gaps
- Updating Conceptual Site Model and risk assessment approach

## Operable Unit 2 – What are the next steps?



- Submit Remedial Investigation scoping document (2019)
- Perform additional investigation (2019)
- Submit revised Remedial Investigation Report (2020)
- Submit revised Feasibility Study Report (2020)

## OU3 – What Have We Done/ What Are We Doing?

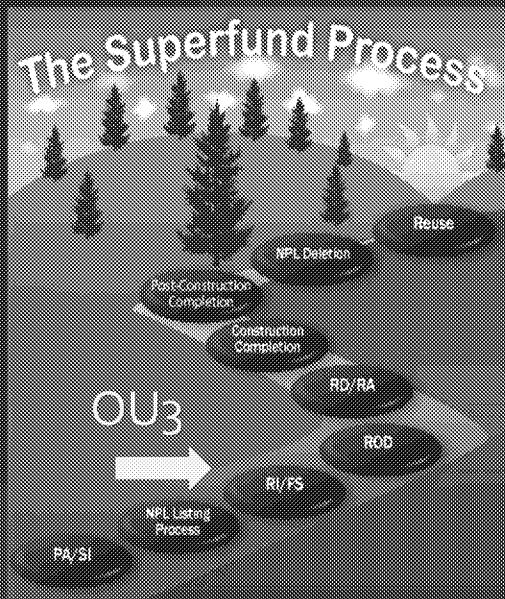
1992 - CDPHE began assessing for environmental contamination at the former Argo smelter.

2007 - EPA issued a remedial (environmental) investigation report and a proposed cleanup plan to the public for comment.

- Groundwater data was insufficient
- EPA began additional groundwater sampling before issuing a final cleanup decision.

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## OU3- What Are The Next Steps?

- EPA will issue an amended remedial investigation report with updated groundwater information.
- EPA will issue a feasibility study report that evaluated cleanup alternatives.
- EPA will issue a Proposed Plan that selects a cleanup alternative.
- EPA will accept public comment on the Proposed Cleanup Plan.

# Globeville Landing Outfall Project

Removal Action Update

November 5, 2018



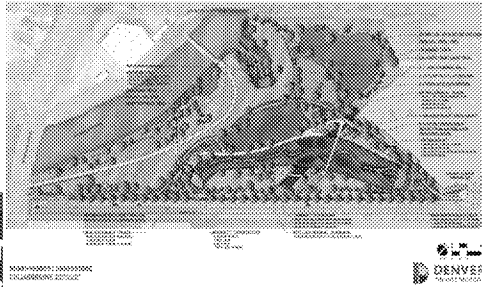
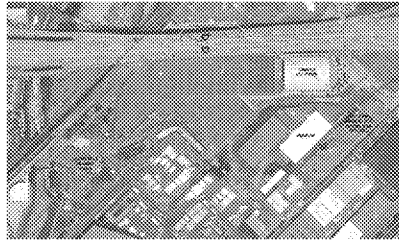
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## Operable Unit 2 – Removal Action



- City and County of Denver worked with EPA in 2015 to implement removal action to construct a portion of the Globeville Landing Outfall (GLO) Project in OU2
- EPA oversaw the environmental components of the removal action to ensure protection of human health and the environment.
  - Management and handling of waste material encountered
  - Management, treatment, and disposal of dewatering liquid during construction
  - Design and construction of an impermeable barrier system



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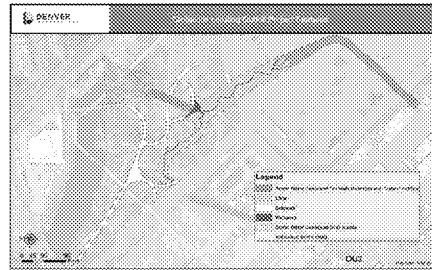


GLO project is part of the Platte to Parkhill stormwater infrastructure project to address 100-year stormwater flows in the Montclair and Park Hill drainage basins.

## Removal Action – What was done?

### Globeville Landing Outfall Project

- December 2016 through August 2018
- Excavation and installation of a 100-year flood stormwater conduit system
- Construction of an open stormwater channel and outfall in Globeville Landing Park
- Installation of a liner within the open channel to ensure groundwater and stormwater do not interact

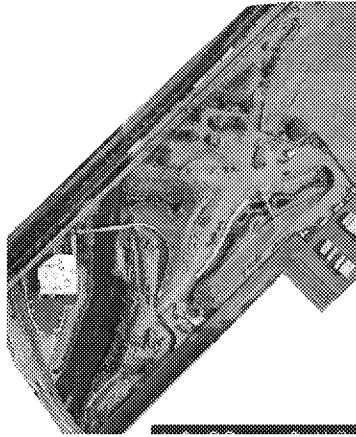


### Outcome

- 160,180 cubic yards of solid waste excavated and removed to construct the drainage system
- 30.3 million gallons of water treated



# Removal Action – What are the next steps?



Globeville Landing Outfall Monitoring and Maintenance Plan

- Ensure liner in the open channel is protected
  - Land use restrictions
  - Visual and land surveys
  - Vegetation inspections
  - Groundwater level monitoring
  - Employee training

Construction Completion Report

- Due 11/29/18
- Summarizes the construction activities, performance standards, quality control / assurance verification, and final inspections

# Summary

## VB/I-70 Superfund Site:

**OU<sub>1</sub>**, Residential Soils (Cole, Clayton, Swansea/Elyria)

Issue: Lead and/or Arsenic in Some Residential Soils

Status: Sampling and Cleanups Complete

Public Comment Opportunity: **EPA Notice of Intent to Delete OU<sub>1</sub> from the National Priorities List of Superfund Sites Public Comment Period February 6-April 8, 2019.**

**OU<sub>2</sub>**, former Omaha & Grant Smelter Location (Denver Coliseum area)

Issue: Lead and Arsenic in some soils and groundwater

Status: Remedial Investigation Phase

Public Comment Opportunity: **Proposed Cleanup Plan possibly in 2020**

**OU<sub>3</sub>**, former Argo Smelter Location (NW Mousetrap area)

Issue: Lead and Arsenic in some soils and groundwater

Status: Remedial Investigation Phase

Public Comment Opportunity: **Proposed Cleanup Plan possibly in 2019**